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AUTHOR Austin, Gregory A.; And Others
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ABSTRACT

This report discusses the substance use patterns and problems of Asian Americans adults and youth relative to other ethnic groups (primarily Whites). In addition, it summarizes the main explanations that have been offered for ethnic differences in use, and offers possible conclusions that may be drawn concerning prevention for Asian-American young people. The following sections are included: (1) "Nature and Extent of Use"; (2) "Substance-Related Problems"; (3) "Correlates of Use"; (4) "Prevention"; and (5) "Summary and Conclusions." Within each section, adults, youth, and use of various drugs are considered separately. The following findings, derived mostly from research in California and Hawaii, are presented: (1) Asian Americans drink less than Whites and have lower levels of drug use; (2) they have a relatively large percentage of abstainers; (3) most drinking is done by males but at moderate levels; (4) considerable variations in drinking patterns and drug use exist among different Asian groups; (5) Asian Americans suffer less from substance-related problems than do other ethnic groups; and (6) the evidence regarding the relative influence of sociocultural factors and physiological factors in keeping alcohol use low among Asians is inconclusive. Abstracts of 19 documents about substance abuse among Asians are included. A list of 94 references is included. (JS)

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SUBSTANCE ABUSE AMONG ASIAN AMERICAN YOUTH

Prevention Research Update

Number Five / Winter 1989

Northwest Regional Educational Laboratory
101 S.W. Main Street, Suite 500
Portland, Oregon 97204

NWREL Center for the Advancement of Pacific Education
1164 Bishop Street, Suite 1409
Honolulu, Hawaii 96813

Far West Laboratory for Educational Research and Development
1855 Folsom Street
San Francisco, California 94103

The Southwest Regional Educational Laboratory
4665 Lampson Avenue
Los Alamitos, California 90270

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Prevention Research Update

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Prevention Research Update is a quarterly current awareness service, prepared by the Western Center for Drug-Free Schools and Communities, which summarizes recent research on adolescent drug abuse and its prevention. Each issue abstracts and reviews the prevention implications of new research dealing with a major topic of concern in the field, placing the new information in the context of past findings. The goal is to help bridge the communications gap between the researcher, the practitioner, and the general population, by disseminating research findings in an accessible manner and providing an introductory review of their significance. Abstracts are arranged alphabetically by first author's last name. Preceding the abstracts is an overview discussion in which references to abstracted studies are identified by an asterisk (*). References to all documents cited are located following the abstracts. Copies of the Updates are available from all the Western Center sites, listed on the last page of this issue.

SUBSTANCE ABUSE AMONG ASIAN AMERICAN YOUTH

Gregory A. Austin, Ph.D.
Michael L. Prendergast, Ph.D.
Western Center for Drug-Free Schools and Communities
Southwest Regional Laboratory

Harvey Lee
Western Center for Drug-Free Schools and Communities
Center for the Advancement of Pacific Educaton / Northwest Regional Educational Laboratory

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OVERVIEW

Introduction

Asian Americans make up about 2% of the population of the United States and are one of the fastest growing immigrant groups. In 1980, they numbered 3.7 million; in 1985, an estimated 5 million. This is a diverse population: within the broad designation "Asian/Pacific Islander" are at least 32 different national and ethnic groups (Trimble, Padilla, and Bell 1987:6). According to the 1980 census, Chinese are the largest Asian minority in the U.S. (812,000), followed by Filipinos (781,000), Japanese (716,000), and Koreans (357,000). It is expected, however, that the 1990 census will show that Filipinos now predominate. Nearly half of the Asian Americans in the United States are foreign-born. Southeast Asians are the newest and fastest growing Asian population on the West Coast.

Almost two-thirds of all Asian/Pacific Islanders live in three states: California (35%), Hawaii (16%), and New York (9%). The majority also live in urban areas. In Hawaii, Asian/Pacific Islanders make up 61% of the population. In California, their numbers grew so fast during the 1980s that they are now the state's third largest ethnic group, behind Caucasians and Latinos, comprising 9% of the population (Chi,

Lubben, and Kitano 1989*:15; Chi, Kitano, and Lubben 1988*:21; 1980 U.S. Census data).

There is even less information on alcohol and other drug use among Asian-American youth than among Native America, Latino, or Black youth. Because of their small numbers, in national samples they are often included in the "Other" ethnicity category. In the NIDA National Household Survey of 1985, Asians were among only 148 "Other" persons out of a total sample of 8,038, and their responses were not listed in the published report of the survey (NIDA 1988:7). As noted in previous *Updates*, the National High School Seniors survey does not analyze results by ethnicity.

Most of the data we have deals with Asians as a single group, and there is often an assumption that drinking patterns for one Asian group can be generalized to all of them. The data do show many similarities in use prevalence, patterns, attitudes, and correlates. But the tendency to lump such diverse nationalities into a single "Asian-American" category "tends to confuse the already lamentable state of research on this topic" (Yu and Liu 1987:14).

Among other factors, Asian Americans differ in the degree to which they are assimilated into American culture. Many Chinese and Japanese families have been in the United States for three generations or more, while most Koreans and Southeast Asians have been here for less than a decade. There are also variations in the degree to which particular communities maintain their cohesiveness in terms of traditional customs, values, language, and organizations. Thus, it must not be assumed that there is homogeneity in substance use and abuse among all Asian groups in the United States.

In recognition of this, in California more detailed information on substance use among the various Asian and Pacific Island populations will be forthcoming as the result of a new law (Assembly Bill 814), which requires that any state agency that collects data according to ethnic group or that contracts for the collection of such data must use uniform categories for Asian and Pacific Islander groups (Asian Indian, Cambodian, Chinese, Filipino, Guamanian, Hawaiian, Japanese, Korean, Laotian, Samoan, and Vietnamese).

In Hawaii, detailed breakdowns by ethnicity have been routine in surveys, but because of the large population of Asian/Pacific Islanders in Hawaii, data from that state are not easily generalizable to other states or to the Unites States as a whole.

Among the few subgroup studies that we have, most have dealt with alcohol use among adults of Chinese and Japanese ancestry. Only one study each has surveyed Korean and Filipino Americans, although the Hawaiian surveys have included people of Filipino ancestry. Research in Hawaii also includes Native Hawaiians. We have very little knowledge at all about the expanding population of Southeast Asians. Furthermore, this research deals primarily with alcohol use. In the ten years before 1983, the National Institute on Drug Abuse did not fund any research programs that focused on Asian and Pacific Americans (Trimble, Padilla, and Bell 1987:11). But even the research on alcohol is scant. Commenting on the problems of determining the extent of alcohol use and abuse among Asian Americans, Sue (1987:57) has noted: "There is a great need for large-scale probability samples in epidemiological surveys to give an accurate picture of substance abuse by Asian Americans. Few such studies exist and most information is derived from small or select samples that may not be representative of the Asian-American population as a whole."

Trimble, Padilla, and Bell (1987:11) attributed the lack of information on Asian substance use to a stereotype held by drug researchers and service providers that Asians do not have drug problems and therefore are in little need of study--the so-called "model minority" stereotype. Similarly, Chi, Kitano, and Lubben (1988*:21) noted that the general assumption that Chinese Americans have very low levels of alcohol consumption has limited empirical evidence in its support. Data do indicate that the use of alcohol or other drug and use-related problems are not as extensive within any group of Asian youth as within the mainstream population or within most other ethnic groups. But the "model minority" stereotype obscures important subgroup differences and substance-related problems that do exist and that need to be considered in the development of prevention programs.

Because of the lack of information on substance use among Asian-American young people, this *Update* summarizes studies of adult alcohol use in greater detail than was done in previous issues. Drawing on the limited information available, we will indicate the substance use patterns and problems of Asian Americans relative to other ethnic groups (mainly Whites), summarize the main explanations that have been offered for ethnic differences in use, and offer possible conclusions that may be drawn concerning prevention for Asian-American young people.[1]

Nature and Extent of Use

Alcohol

Adults

No national survey of alcohol use has reported on drinking levels and patterns among Asians. Almost everything that we know about drinking among Asian Americans has come from surveys conducted in California and Hawaii. The results of drinking surveys among adults that have been conducted point to several conclusions: Asian Americans drink less than Whites, they have a relatively large percentage of abstainers (particularly among women), most drinking is done by males but at moderate levels, and considerable variations in drinking patterns exist among different Asian groups. There is also some

evidence that alcohol use among Asian Americans is increasing.

California. Researchers at the University of California, Los Angeles, have surveyed drinking among Chinese, Japanese, Korean, and Filipinos in Los Angeles. Abstinence among these groups was high: among men, 17% of Japanese, 19% of Filipinos, 21% of Chinese, and 45% of Koreans. Among women, abstinence was reported by 27% of Japanese, 51% of Chinese, 55% of Filipinos, and 75% of Koreans. Heavy drinking among men ranged from a low of 14% among Chinese to 29% among Filipinos; Koreans (26%) and Japanese (29%) were close behind Filipinos. Three percent or less of the women were heavy drinkers, except Japanese women, with 12%.

The researchers concluded that while the results confirmed the traditional view of Asian women as abstainers or light drinkers, they also revealed a considerable amount of heavy drinking among men, particularly Japanese and Koreans, possibly as high as in the general U.S. population.

These Asian-American groups also differed significantly in their drinking behavior. Among all four groups, similarities were found among those who drank heavily: they were most likely to be men under age 45, of relatively high social status and educational background, in professional or white collar occupations, with permissive personal attitudes towards use, and with friends tolerant of drinking. But even those who were heavy drinkers exhibited little evidence of alcohol-related problems (e.g., arrest for drinking, loss of personal impairment, drastic changes in lifestyle) (Chi, Lubben, and Kitano 1989*; Kitano and Chi 1989; Lubben, Chi, and Kitano 1988*; Lubben, Chi, and Kitano 1989*).

These samples only included Asian Americans, so direct comparison with White drinking levels is not possible. A rough comparison, however, is provided in the National Household Survey of 1985, in which 12% of adults age 26 and older were abstainers (NIDA 1988:21).

A survey in Santa Clara County focused on the drinking patterns of Japanese Americans and Whites, as part of a larger joint US-Japanese study of Japanese drinking in Japan, Hawaii, and California (Clark and Hesselbrock 1988; Kitano, Chi et al. 1988*). Whites in Santa Clara were more likely to drink and to drink heavily than Japanese. The difference between the percentages of male drinkers was not great (87% for Whites vs. 82% for Japanese), but the percentage of heavy drinkers among Whites was twice that among Japanese (26% vs. 13%). Among females, nearly three times as many Whites as Japanese were heavy drinkers (11% vs. 4%).

Hawaii. Four surveys of alcohol use among the major ethnic groups in Hawaii have been conducted since 1975 (Schwitters, Johnson et al. 1982*; Le Marchand, Kolonel, and Yoshizawa 1989*; Hawaii 1979, cited in Ahern 1989; Murakami 1989*); a fifth surveyed alcohol use among Japanese-Americans on Oahu (Kitano, Chi et al. 1988*). The reported percentages from each survey are not always comparable because of differences in the definition of drinking. The rankings of the different groups included in each survey are comparable, however.

A survey of drinking among ethnic groups in Hawaii conducted in 1975 found that the proportion of current drinkers was highest among Whites (81%), followed closely by Hapa-Haoles (80%). (Hapa-Haole is a Hawaiian term referring to a person with one parent of Caucasian ancestry and the other of Asian ancestry.) Hawaiians/Part Hawaiians (69%), Chinese (69%), and Japanese (67%) reported similar proportions of drinkers. Trailing the other groups by a considerable amount was Filipinos, among whom 49% were current drinkers (Schwitters, Johnson et al. 1982*; for other reports on this sample, see Schwitters, Johnson et al. 1982a; Wilson and McClearn 1978).

From 1975 to 1980, the Epidemiology Program of the Cancer Research Center of Hawaii included questions about drinking practices in its yearly health survey (Le Marchand, Kolonel, and Yoshizawa 1989*). As in the previous survey, Whites and Native Hawaiians had the highest percentages of drinkers, and drinking was more common among Japanese than among Filipinos. In this survey, however, Chinese males ranked last, while Chinese females ranked third. A somewhat different pattern emerges when the average amount of alcohol consumed per day is examined. Native Hawaiians reported the highest level of alcohol intake, followed by Whites. Although Japanese were more likely than Filipinos to drink at least weekly, Filipinos drank more per day than Japanese. The discrepancy in rank between Chinese males and females in frequency of use disappeared when quantity was considered: both were least likely of all groups to drink large amounts at a time.

A survey by Hawaii's Department of Health in 1979 confirmed the results of the earlier surveys: Native Hawaiians had the highest prevalence rate, Filipinos the lowest, with Japanese and Chinese in the middle (Hawaii 1979, cited in Ahern 1989). A second Department of Health survey in 1984 also found that larger percentages of Native Hawaiians drank and drank heavily than did Filipinos and Japanese, but contrary to other surveys, this one found higher levels of drinking and heavy drinking among Filipinos than among Japanese (Murakami 1989*).

Drinking among Asian Americans may differ significantly by location. A survey of Japanese Americans residing on Oahu in 1984 found a fairly high level of abstinence among males (21%) compared with samples of Japanese Americans in Santa Clara (19%) and Los Angeles (14%). The level of heavy drinking in Oahu (29%) was somewhat less than that in Los Angeles (36%), but was more than double that in Santa Clara (13%). For females, the rankings among the three sites for abstinence and for heavy were the same as for males (Kitano, Chi et al. 1988*).

Youth

Surveys that report on alcohol use among Asian-American young people have sampled three types of populations: secondary school students, college students, and young people not in school. With few exceptions, those that did survey general populations of youth only included a single category of "Asian" or "Oriental." Also, the small number of Asian Americans included in some of the samples cast doubt on whether the results can be generalized to the total population of Asian youth. The results from the college surveys should be viewed with caution since Asian college students tend to be an elite group, whose alcohol use patterns may not represent those of other young adults of similar age.

Secondary School Surveys. A national survey of junior and senior high school students conducted in 1974 found that Asian-American youth reported high levels of abstinence relative to other ethnic groups. But significant gender differences also existed among those who drank. Asians ranked second in the percentage of abstainers, after Blacks (35% vs. 41%). Asian girls had the lowest level of heavy drinking (5%). Among males, however, those who did drink tied with Native-American boys as the heaviest drinkers (25%). Heavy drinking was five times greater among Asian boys than among Asian girls, which was the largest male:female ratio of all the ethnic groups (Rachal, Williams et al. 1975, cited in Weibel-Orlando 1986:167).

State and local surveys have found similar results. Barnes and Welte (1986) surveyed over 27,000 seventh-to-twelfth grade students in New York State in 1983, 2% of whom were Asian Americans (most of these were probably Chinese Americans). Asians had the lowest level of drinking out of six ethnic groups: only 45% of Asian students reported drinking at least once in the past year, which was substantially below the 61% of the next highest group (West Indians). Asians did not, however, rank lowest in the proportion of heavy drinkers (6%), being slightly higher than Blacks (5%) and West Indians (4%). (Heavy drinking was defined as drinking at least once a week and drinking large amounts at a typical session.) Despite the low level of drinking among Asians, they drank more per day than any other ethnic group (1.46 ounces per day vs. 0.76 ounces for Whites). This finding needs to be further studied to determine whether it is true of Asian students generally and, if so, why it should be so. Again, significant gender differences among Asian-American students were found. All of the heavy drinkers among Asians were males, whereas the other ethnic groups had at least some females who were heavy drinkers.

In California, a biennial survey of alcohol and other drug use among 7th-, 9th-, and 11th-grade students in California provides data on how use has changed over time among different ethnic groups (Skager, Frith, and Maddahian 1989). In the most recent survey, conducted in the winter of 1987-1988, 7,022 students throughout the state completed anonymous questionnaires about their drug use. At all three grade levels, Asian-American students had significantly lower rates of alcohol use than the other ethnic groups included within the study; furthermore, their use of alcohol did not change significantly from the 1985-1986 survey.

In a longitudinal survey of drug use among students in Los Angeles at three points in time (1976, 1979, 1980), the rankings remained the same in all three years: Whites had the highest rates of use, followed by Hispanics, then Asians, then Blacks (Maddahian, Newcomb, and Bentler 1986).

The only school-based survey that reported results for specific groups of Asian/Pacific Islanders was carried out in schools throughout Hawaii in 1987. The sample included six ethnic groups: Filipino, Japanese, Hawaiian/Part Hawaiian, White, Mixed, and Other. Among 12th graders, Whites and Hawaiian/Part Hawaiians reported the highest prevalence of use (both 91%), while Filipinos and Other reported the lowest (both 81%); Japanese and Mixed fell between (86%). Heavy use was highest among Hawaiian/Part Hawaiian students and lowest among Filipino and Japanese students. The latter two groups also had larger percentages of low-level users than the other groups (Anderson and Deck 1987*:23-24).

College Surveys. Sue, Zane, and Ito (1979*) studied drinking patterns among Asian and White students at the University of Washington. Consistent with other studies, Asian students reported lower levels of drinking than White students. Abstinence or light drinking was reported by 15% of Asians and 9% of Whites; heavy and very heavy drinking was half the level among Asians as among Whites (34% vs. 66%).

In a survey at the University of California, Los Angeles, Asian students were seven times more likely to be abstainers than Whites (20% vs. 3%). Infrequent or light drinking was more common than moderate or heavy drinking among Asian students, whereas it was the reverse for White students (Akutsu, Sue et al. 1989*).

A survey of alcohol use among college students in Hawaii broke down the results by ethnicity and gender. Among males, Whites and Hawaiians/Part Hawaiians had the highest proportion of alcohol users and Chinese and Filipinos had the lowest, with Japanese in the middle. Among females, the order was the same, except that Hawaiians/Part-Hawaiians rather than Whites held first place (Danko, Johnson et al. 1988*).

Community Surveys. A survey of San Diego Job Corps members conducted in 1981 found that Indochinese young people had the lowest level of drinking (use in the past six months), compared with Whites, Blacks, and Hispanics. As in other surveys, gender differences among the Indochinese youth exceeded those of the other groups. Two-thirds (66%) of Indochinese males and 43% of females drank, compared with an average of 87% for males

and 88% for females for the other groups. Indochinese youth began drinking later than other groups: age 18 for both males and females, compared with 11 years for males and 14 years for females among Whites. This was the only study found that reported age of initiation for drug use (Morgan, Wingard, and Felice 1984). (Although not stated in the article, it is likely that most of the Indochinese in the sample were Vietnamese).

The first (and apparently the only) community-based survey of substance use among Asian-American youth was conducted in San Francisco's Chinatown in 1985. The 123 subjects, who ranged in age from 13 to 19 years old, were selected by a chain referral method rather than randomly, so it is not clear whether the sample was representative of the population of Chinese-American youth in Chinatown or San Francisco generally. The percentage of the sample indicating ever use of each alcoholic beverage was as follows: beer 77%; wine 54%; and hard liquor 49% (Wong n.d.*).

Other Drugs

Very few surveys have been conducted of drug use among Asian Americans. A study from the 1960s of opiate addiction among Chinese is of more historical than contemporary interest (Ball and Lau 1966). Only one recent survey of drug use among Asian-American adults has been found. In Hawaii, three Asian-American groups (Chinese, Japanese, and Filipino) had significantly lower levels of use of various licit and illicit drugs than Native Hawaiians and Whites, with Filipinos reporting the lowest levels of use (McLaughlin, Raymond et al. 1987*). Unlike the case with alcohol, there is more information on drug use among Asian-American young people than adults.

Secondary School Surveys. Within the New York State sample of junior and senior high school students, lifetime use of any drug (other than alcohol) by ethnicity was a follows: American Indian 54%; White 27%; Asian 26%; Hispanic 26%; Black 19%; and West Indian 16% (Welte and Barnes 1987:331). Asians ranked higher for drugs than for alcohol, which was largely accounted for by their relative high rates of over-the-counter and psychotherapeutic drugs. The percentage of ever use of particular drugs by Asian-American students was as follows, with the rank order of Asians and the percentages for Whites indicated in parentheses: marijuana 23% (6th; 45%); over-the-counter drugs 31% (4th; 34%); pills 20% (4th; 33%); and hard drugs 12% (5th; 17%) (Welte and Barnes 1985:491).

The report of the California statewide student survey reported ethnic comparisons for specific drugs only if differences between use levels were significant for at least two ethnic groups. Generally, Asians reported less drug use than other groups, but there was some variation by grade level. In all grades, Asians had the lowest level of marijuana use; among 11th graders, they had the lowest level of cocaine use. Only for inhalants did Asians have slightly higher (but nonsignificant) levels of use: higher than Blacks in 9th grade and higher than Blacks and Hispanics in 11th grade. Between the 1985-1986 and the 1987-1989 surveys, the use of the most commonly used illicit drugs declined among all students. Those ethnic groups with the highest levels of use generally showed significant declines in the greatest number of specific drugs. For Asians, the only significant decline in use was for cocaine (Skager, Frith, and Maddahian 1989).

Among four ethnic groups in the survey of Los Angeles students, Asians had the lowest level of cannabis use and the next to the lowest levels of the use of non-prescription drugs and hard drugs (after Blacks) (Maddahian, Newcomb, and Bentler 1986).

In the Hawaii student survey, results for 12th graders indicated that the highest levels of lifetime use of illicit drugs was found among Hawaiians/Part Hawaiians (66%), followed by Whites (59%), Mixed (58%), Other (46%), Filipinos (41%), and Japanese (39%) (Anderson and Deck 1987*:24).

Other than Native Hawaiians, little is known about drug use among Pacific Islanders. A survey conducted on Guam in 1974 found use rates (at least once in the previous year) ranged from 40% for marijuana to 4% for methaqualone. Drug use was highest among stateside students and lowest among Filipino students, with Micronesian and Chamorro students falling between (Chung [1975]).

Community Surveys. Indochinese young people in the San Diego Job Corps sample (drinkers only) had very low levels of drug use; none had used cocaine; 3% had used marijuana; 3% speed; 5% glue; 3% paint; and 3% angel dust. By way of comparison, although Whites reported use of glue or paint, their use of other drugs ranged from a low of 7% for cocaine to 53% for marijuana (Morgan, Wingard, and Felice 1984).

By contrast, relatively high rates of drug use were found among young people in San Francisco's Chinatown. The percentages indicating ever use of various drugs were as follows (with the results for alcohol repeated from above for comparison): beer 77%; cigarettes 75%; marijuana 59%; wine 54%; hard liquor 49%; quaaludes 42%; cocaine 40%; hashish 22%; Valium 16%; and LSD 15%. Limited use was reported for amphetamines (5%), amyl nitrates (2%), opium (2%), PCP (1%), and glue (1%). Males and females had roughly comparable levels of use for most drugs, but females more often reported use of Valium, Codeine, and quaaludes. No one reported use of heroin. By comparison with previous community surveys of drug use among other ethnic groups in San Francisco, quaalude use was twice as high among Chinese-American youth as among White and Latino youth and five times greater than among Black youth. On the other hand, Chinese Americans had lower use of heroin, PCP, amphetamines, and Valium than did other groups (Wong n.d.*).

Nonsurvey Data. The survey data reviewed so far show low levels of drug use among Asian

Americans compared with other ethnic groups. Other evidence, however, present a less favorable picture. Many within the Asian community are concerned that drug use is greater than what surveys show and that it is rising. A NIDA report on drug abuse among minorities (Trimble, Padilla, and Bell 1987) summarized the results from surveys carried out in the 1970s that indicated low levels of drug use, but the report also cited other evidence of serious drug problems among Asian youth. It quoted from a report on drug use among Asian-American youth in the Seattle area, which stated that "drug use within the Asian youth community is much more serious than what is recorded by law enforcement agencies or indicated by the policies of drug treatment programs....Asian youth appear to use drugs at a level equal to if not higher than the national average...known users tend to begin use of drugs earlier and continue in a manner and extent far above the national average. Heroin was used by at least 40% of this group and appeared to be continuing" (p. 7, quoting Washington State Commission 1983).

At state legislative hearings held in San Diego in the Fall of 1989, witnesses testified that while drug use within Asian communities was not widespread, the problem was growing and would get worse unless action was taken to contain it. Witnesses mentioned that recently formed Asian youth gangs in San Diego would likely result in increased drug use and trafficking among Asian youth (California Senate 1989).

A very recent phenomenon, which has received considerable press coverage, is the apparent increase of use of smokeable methamphetamine known as "ice," which is sometimes combined with crack. The drug is widely used in Japan, and newspaper and television reports have indicated that a major source of "ice" is Korean and Filipino gangs in Hawaii. But the little evidence that does exist on this new form of drug use suggests that it is no greater problem among Asian-American youth than among other ethnic groups (*Los Angeles Times* 10/8/89, 10/14/89).

Summary

The surveys of alcohol use among adults and young people suggest rather consistent patterns among the various ethnic groups. Drinking is more common among Whites than among any Asian/Pacific Islander group for which data are available. Asians have lower prevalence rates that Native Americans and Latinos. Only Blacks have similar or lower rates. As is found with other ethnic groups, Asian males are more likely to drink and to drink heavily than females; unlike other groups, the differences in the drinking behavior between Asian males and females tends to be more polarized. Among Asian subgroups, only Native Hawaiians drink at levels that are more similar to Whites than to other Asian groups. Japanese generally rank after Whites and, in Hawaii, after Native Hawaiians. Drinking is lowest among Filipinos and Chinese. Only one survey has included Koreans (Lubben, Chi, and Kitano 1989*), and it examined only adults. The results indicated that both men and women had a lower level of drinking than did Chinese, Filipinos, and Japanese, but Korean men had levels of heavy drinking that approached those of Japanese and Filipino men, suggesting even larger gender differences than exist among other Asian subgroups. The single survey that included Indochinese youth found that their level of alcohol use was considerably below the average for the other non-Asian groups surveyed.

Very few studies--on adults or youth--provide data on the prevalence of drug use among Asian/Pacific Islanders. Furthermore, studies tend to group all Asian Americans in the sample together. What there is suggests, as with alcohol, that they have low levels of use compared with other ethnic groups; an exception is Native Hawaiians, whose drug use appears to be more similar to Whites than to other groups. Some indirect and anecdotal evidence suggests that the prevalence of drug use in some Asian-American communities is higher than that reported in more formal surveys.

Substance-Related Problems

Alcohol

Data on levels of use indicate that those Asian males who drink often have high rates of heavy drinkers, although still not as high as among Whites. Thus, one might expect that substance-related problems would be heavier in this group, while remaining low in the Asian population in general, a supposition that is born out by what limited information is available on use problems.

Adults

Studies indicate that Chinese and Japanese Americans have low treatment admission rates for alcoholism (Sue, Zane, and Ito 1979*:41). As discussed further below, admission rates probably do not reflect of the actual number of people who need treatment, but other data do support the generalization that Asian Americans have low levels of alcohol problems. For the period 1978-1980, the age-adjusted death rate for chronic liver disease and alcoholic cirrhosis among Chinese Americans was 1.2 per 100,000 population, compared with 4.7 for Whites and 10.5 for Blacks (Yu and Liu 1987:16). In a recent survey of Asian Americans in Los Angeles, reports of alcohol-related problems were few; for instance, among the Japanese, none of the respondents replied that they experienced problems with alcohol, although several did mention problems among relatives or friends. The existence of Alcoholic Anonymous groups for Japanese in Los Angeles does, however, suggest that some portion of the Japanese community suffers from drinking problems (Kitano and Chi 1987:46; Kitano, Lubben, and Chi 1988*:419, 427).

Youth

In the survey of New York State students, Asians who had more than 10 misconduct incidents during the school year drank more than Whites with a similar level of misconduct (1.64 ounces per day vs. 1.40). Asian students who drank also reported more problems than other groups: they ranked second in the mean number of times drunk per month and in the mean number of alcohol-related problems per month, after American Indians. (Alcohol problems included trouble with teachers, friends, or police because of drinking, drinking-driving, use of alcohol at school, attending class while high.) Even though Asian students drank the greatest amount of alcohol per day, they had the lowest mean number of alcohol-related problems per month for each ounce of alcohol consumed per day. What is striking in the drinking behavior of Asian students in this survey is that differences between males and females on the various measures were greater than those for the other ethnic groups; in other words, males accounted almost totally for drinking problems among Asian students (Barnes and Welte 1986; Welte and Barnes 1987).

In agreement with results from other surveys, Morgan, Wingard, and Felice (1984) found that Indochinese youth in San Diego had substantially fewer problems (vocational, legal, medical) associated with drinking than other ethnic groups.

By contrast, an exploratory study of alcohol use among university students in Oklahoma found that Chinese respondents had relatively high levels of alcohol problems compared with other ethnic groups (Hughes 1981).

Drugs

Data from NIDA's CODAP (Client Oriented Data Acquisition Process) system for 1983 indicated that less than 1% of the clients in treatment were Asians (Malone 1985:138). In a survey conducted in Houston of Indochinese refugees, 14% reported that they sometimes felt they had troubles with drugs other than alcohol (Yee and Thu 1987*). Youth in San Francisco's Chinatown reported a variety of acute physical and psychological problems associated with substance use, including (1) having been sick from drinking alcohol (48%), (2) had a smoker's cough (42%), (3) had a bad hangover from alcohol (40%), (4) had shortness of breath from smoking, and (5) suffered memory loss from alcohol or drugs (24%). Forty percent used marijuana at school, nearly 11% on a regular basis. The main problems associated with using marijuana at school had to do with being able to function mentally (Wong n.d.*).

Although the data from surveys and treatment facilities show that Asian-Americans have fewer problems with alcohol and drugs than other ethnic groups, members of the various Asian/Pacific Islander communities are concerned that substance abuse officials and community agencies underestimate the extent of the problem, largely because of the "model minority" stereotype. As a result, alcohol and drug problems among Asian Americans receive insufficient attention, either in terms of research efforts and treatment and prevention resources. Treatment services for Asian Americans may be inadequate or even nonexistent. Also, since young people in Asian families are taught that their behavior reflects on the entire family for generations, personal problems tend to be hidden or solved within the family. Thus, people who do have alcohol or other drug problems are reluctant to seek professional treatment. Those who do seek treatment tend to enter a private hospital, often outside the local community, rather than use services that participate in data-gathering programs. An additional factor, it has been alleged, is that the legal system often treats Asian juveniles more leniently than other minority groups, which means that Asian young people with substance abuse problems are less likely than other youth to be forced into treatment, which further hides the problem. But once they do enter the public health service system, either because they have exhausted private resources or because of legal difficulties, their substance-use problems may have reached an advanced stage (Sue and Morishima 1982; Kitano 1982:424; Kitano, Hatanaka et al. 1985; Kotani 1982; Sue 1987).

Even here, however, one must be aware of differences among the various Asian/Pacific Islander groups and within generations. Recent immigrants and refugees are more likely to handle problems within the community, while those who have become more assimilated into American society are probably more comfortable using available public services. Therefore, a finding that treatment rates for a recently arrived group, such as the Vietnamese, were lower than those for a more established group, such as the Japanese, would not necessarily mean that Vietnamese had fewer problems than Japanese. Thus, researchers need to consider differences in ethnic background, in generational status, and in degree of assimilation when examining substance-related problems among Asian/Pacific Islanders (Chang 1981:7; Shon and Ja 1982:221). The issue of assimilation is discussed below.

Summary

The limited information available indicates that, consistent with their low levels of use, Asian Americans suffer less from substance-related problems than do other ethnic groups. What problems do occur are mainly accounted for by males. It would be a mistake, however, to say that Asian Americans do not have problems associated with the use of alcohol and other drugs. Indirect evidence suggests that the magnitude of alcohol and other drug problems may be greater than what is commonly associated with the "model minority" stereotype or what is reported in surveys and official records because of the tendency of Asian Americans to handle problems within the family or the community rather than seek out public treatment services. This latter

fact may contribute to Asians' having relatively high rates of more severe substance-use problems once they come to public attention.

Correlates of Use

Most of the research-based information on the correlates of substance use come from surveys of alcohol use. A major focus of research on alcohol has been the role of physiological or genetic factors as accounting for differences in drinking patterns between Asians and Whites. There has been no suggestion that differences in drug use are also explained by physiological factors, but it is likely that the sociocultural influences that have been identified for alcohol use also operate in regard to drug use.

Physiological Factors

Studies have shown that most Asians exhibit a "flushing reaction" following alcohol consumption, which apparently results from the fact that Asians metabolize alcohol more quickly than Whites, causing flushing, tachycardia, dysphoria, and other feelings of discomfort (for recent reviews, see Chan 1986; Stoil 1987/1988; Clark 1988). Some researchers believe that the flushing response and the unpleasant subjective symptoms discourage alcohol consumption among Asians, particularly at high levels (Akutsu, Sue et al. 1989*:261-262). The physiological basis of the flushing response has been traced to the lack of a liver enzyme (called ALDH-I) involved in the metabolism of alcohol. According to Stoil (1987/1988:135), "In effect, the absence of ALDH-I acts as a natural equivalent to administration of the drug disulfiram (Antabuse) by creating a physical reaction to alcohol that is so unpleasant that it discourages many Asians from drinking excessively."

The degree to which Asians are "immunized" against excessive alcohol use by flushing is not clear, however. Nagoshi, Dixon et al. (1988) concluded from a survey of families in Hawaii, Korea, and Taiwan that to the extent that flushing influences alcohol consumption, the covariance is almost entirely genetic. In a study of variables that might account for differences between Asian and White alcohol consumption, Akutsu, Sue et al. (1989*) found that while both attitudes toward drinking and physiological reactivity were significant predictors of ethnic differences in drinking, physiological reactivity was more important than attitudes. By contrast, in their survey of alcohol use among different ethnic groups in Hawaii, Johnson and his colleagues (Johnson, Nagoshi et al. 1987*) found strong, although indirect, evidence that cultural norms had a stronger influence on drinking behavior than did genetic differences in alcohol metabolism.

The importance of flushing should not be exaggerated. Not all Asians experience flushing, and the prevalence of flushing differs from one Asian group to another. Other groups that also flush, such as Native Americans, still have high rates of drinking and alcohol problems (Sue 1987:61-62). Furthermore, there are two types of flushing: "fast flushing," which occurs after one drink or less, and "slow flushing," which occurs after two or more drinks. Fast flushers tend to report less alcohol use than slow flushers, although fast flushing is less common than slow flushing (Johnson 1989:388). Finally, not all Asians who flush stop drinking once flushing occurs (Sue, Zane, and Ito 1979*; Chu, Fertig et al. 1978).

According to Chan (1986:94), "Therefore, flushing does not automatically 'immunize' an individual against alcohol use....Presumably, the prevalence of the highly visible flushing response will deter Mongoloid groups from drinking excessively as long as their social structure is intact and there are social sanctions against intoxication." Similarly, Johnson (1989:388) concluded from studies of flushing in Hawaii, Japan, Taiwan, and Korea that "flushing is associated with reduced consumption only for fast flushers in relatively intact cultures with a high normative rate of alcohol consumption."

The evidence from research to date would seem to indicate that within- and between-group differences in Asians and Asian Americans in flushing response are so large as to cast doubt on the physiological model as the main explanation of Asian drinking behavior, since the model would predict similar rates of drinking regardless of generational status or cultural values (Sue 1987).

An additional physiological factor that may influence drinking among Asians/Pacific Islanders was found in a survey of drinking in Hawaii. Among abstainers and former drinkers, those of Asian/Pacific Islander ancestry (Chinese, Japanese, Filipino, Hawaiian/Part Hawaiian, and Hapa-Haole) were significantly more likely than Whites to state that they did not drink or had stopped drinking because they disliked the taste of alcohol (Johnson, Schwitters et al. 1985*).

Sociocultural Factors.

Since genetic or physiological factors are apparently not sufficient alone to account for ethnic differences in drinking behavior, many researchers have sought an explanation in the values, customs, and traditions of the various Asian groups. Several writers have noted that Americans value assertiveness, individual achievement, individualism, and spontaneity, while the Chinese and Japanese value responsibility to others, interdependence, restraint, moderation, and group achievement. Alcohol use is thus presumed to be more congruent with American than with Chinese or Japanese cultural traditions (Sue 1987:62).

In accordance with Asian cultural values, Asian drinking is social rather than solitary, occurs in prescribed situations, is usually accompanied by food, is used to enhance social interaction, and occurs within a context of moderate drinking norms.

Women are expected to drink little or no alcohol. In Chinese and Japanese cultures, aggressive, disorderly, and noisy behavior when intoxicated are particularly condemned. Thus, even when they do become intoxicated, Chinese and Japanese drinkers are seldom arrested for public drunkenness or other disorderly behaviors in public. Although cultural traditions tend to keep drinking levels low, as noted above, they may also hide problems that do exist (Chu 1972; Kitano, Hatanaka et al. 1985; Chu, Fertig et al. 1978; Singer 1972; Wang 1968; Chi, Lubben, and Kitano 1989*:15-16; Sue 1987:63).

Drinking in Asian society is thus governed by social norms that indicate what behavior is prescribed ("drink this way") and what behavior is proscribed ("don't drink this way"). Furthermore, drinking occasions appear to be an integral part of social life. As Frankel and Whitehead (1981:17) note, "clear and consistent proscriptive and prescriptive norms, together with drinking practices that are well integrated into the cultural life of the group, are associated with low rates of damage."

Writing of the Chinese, Kua (1987:224-225) has observed:

> Drinking is permitted in the Chinese family but drunkenness is frowned upon and is considered an embarrassment to the individual and his family. Adults are encouraged to drink, especially during festivals or banquets but excessive consumption or disorderly behavior contravene the social mores which have been influenced since ancient time by the teachings of Confucianism and Taoism. Both of these philosophies emphasize moderation, order and harmony in the society, and invariably influence Chinese attitude towards alcohol consumption.

While alcohol is an essential part of Chinese religious ceremonies and festive occasions, excessive use is condemned as one of the four vices that men should seek to avoid (the others being womanizing, gambling, and opiate use) (Yu and Liu 1987:14). Wang (1968) believed that the importance of intellectual control within Chinese culture made alcohol an unlikely drug of choice.

Descriptions of cultural background and drinking styles in other Asian groups would differ in detail, but it is clear that the drinking attitudes and customs of the various Asian cultures are similar in their encouragement of moderation.

If cultural values account for the differences in the drinking behavior of Asians and Whites, then one would expect that Asian Americans would hold more negative attitudes toward drinking that Whites and that they would perceive their parents as also holding negative attitudes. This hypothesis was supported by Sue, Zane, and Ito (1979*) in their study of University of Washington students; they found that the Asian students had, and reported their parents as having, more negative attitudes toward drinking than Whites and that the differences in attitudes were significantly related to reported drinking levels.

Further support for a sociocultural theory of ethnic drinking differences is a survey by Danko, Johnson et al. (1988*) of Hawaiian college students' judgments of what they perceived as "normal" drinking behavior in relation to their actual alcohol use. They found that ethnic groups differed in what they regarded as "normal" alcohol consumption and that these beliefs were closely associated with drinking levels. The higher the level of drinking that students considered normal, the higher their level of consumption. An interesting finding was that, whether grouped by gender, ethnicity, or drinking status (abstainer, former drinker, current drinker), the respondents believed that other people were more liberal than themselves in what they regarded as normal drinking.

Acculturation.

As has been found for Native Americans and Latinos, the level of alcohol use among Asian Americans is influenced by the degree of acculturation (Austin 1989; Austin and Gilbert 1989). According to acculturation theory, those Asians who are recent immigrants should drink in a manner similar to drinking in their home country; as Asians become more assimilated into American culture, their alcohol consumption should become more like that of Whites (Chi, Lubben, and Kitano 1989*:15). A variation of this view is that alcohol becomes one means by which Asian immigrants cope with the stress that accompanies changes in social norms, family relationships, and upward mobility (Yu and Liu 1987:60). The evidence for the influence of acculturation on Asian drinking is mixed, however.

Several studies have found generational effects. In their survey of college students, Sue, Zane, and Ito (1979*) found some support for the hypothesis that more highly assimilated Asian students drank more than did less assimilated students. Similar results were reported by Kitano, Hatanaka et al. (1985) for Japanese-American adults. Yuen and Johnson (1986, cited in Danko, Johnson et al. 1988*:760) found that daughters of Chinese and Japanese ancestry in Hawaii drank significantly more than their mothers did.

Several studies have cast doubt on the acculturation theory. A recent survey of college students concluded that acculturation was not a significant predictor of increased drinking among Asians (Akutsu, Sue et al. 1989*). In the survey of Filipinos in Los Angeles, women retained Asian drinking patterns while men drank in ways that were more similar to western patterns, which would suggest that other factors besides acculturation were operating (Lubben, Chi, and Kitano 1988*). Kitano, Chi et al. (1988*) analyzed drinking behavior in four samples of Japanese residing in Japan, Oahu, Santa Clara County, and Los Angeles to test the hypothesis that drinking patterns of Japanese Americans would

be less like those in Japan and more like those of Whites as one moved successively from Oahu, to Los Angeles, to Santa Clara. The findings indicated that, contrary to the hypothesis, there was no clear progression in alcohol consumption by location. For instance, the acculturation theory would predict that in Santa Clara County, where the Japanese community is small, scattered, and relatively well integrated into the dominant culture, Japanese drinking patterns would be similar to those of Whites. In fact, compared with Whites in Santa Clara, there was much more abstinence and infrequent drinking and much less moderate and heavy drinking among Japanese. The authors concluded that the influence of the dominant culture on ethnic drinking patterns was mediated by local conditions--"community and family cohesion, reception by the dominant community, length of stay, and life experiences" (p. 130).

Reasons for Use

Several studies have asked respondents why they use (or do not use) alcohol or other drugs. Among the Job Corps members in San Diego, the two most common responses given by Indochinese youth were to forget (59%) and friends drink (55%) (Morgan, Wingard, and Felice 1984). Yee and Thu (1987*) found that 40% of the Indochinese refugees (nearly all Vietnamese) interviewed in Houston sometimes used alcohol to deal with their problems; 6% said they often did so. Percentages for the use of other drugs to diminish sorrows or problems were 12% (sometimes) and 0.5% (often). Those who reported use of alcohol and other drugs as a coping mechanism were more likely to report having problems with drugs. An issue related to reasons for use is the positive experiences that people associate with drug use. In the survey of Chinese-American youth in San Francisco, the top four positive associations with drug use were feeling relaxed, feeling happy and carefree, feeling less anxious and tense, and experience music as more enjoyable; all of these fell between 50% and 60%. The next step down were those positive associations mentioned by between 30% and 40% of the sample: find it easier to rap with girls/boys, experience relief of pain, have more energy, able to escape, increased self-confidence, and feel closer to other people (Wong n.d.*). As the author comments, "for Chinese American youth who have to cope with not only the normal problems and concerns of growth but also the added pressures of family, parents and the larger communities as a result of [their] bicultural and bilingual statuses, positive associations [from drugs] to lessen pressures, anxiety and tensions and to promote relationships, self-confidence and energy are viewed as attractive and helpful to the user" (pp. 12-13).

Risk Factors

Asian youth experience many personal and social problems by virtue of their ethnic and generational status that may lead to substance use. UCLA researchers have investigated ethnic differences in risk factors for substance in two student populations. A risk factor index was constructed from 12 separate factors that had been found to be antecedent to drug use initiation or increased drug involvement (e.g., early alcohol intoxication, perceived adult drug use, absenteeism, emotional distress). Among students in the Ventura County (California) school district, Asians had the lowest risk index for substance abuse generally and for cocaine and cannabis specifically compared with other ethnic groups (differences between groups for alcohol and hard drugs were not significant) (Newcomb, Maddahian et al. 1987:431).

In a similar survey of students in Los Angeles, Asians had the second lowest overall risk factor score (after Blacks). For Asian students, the main high-risk factors were low religiosity, poor self-esteem, poor relationships with family, and sensation seeking. As the number of risk factors among Asian increased, there was a corresponding likelihood of heavy use of cannabis and hard drugs, as also occurred among the other ethnic groups (Maddahian, Newcomb, and Bentler 1988*).

Other specific risk factors have been discussed by Cheryl Seikya (1989), Prevention Director at the Asian American Drug Abuse Program in Los Angeles.

- *Fear of Failure.* Because of the "model minority" stereotype and the high expectations for achievement, Asian-American youth are under great pressure to succeed, which they may try to relieve through alcohol or drug use.
- *Lack of Social Skills.* Particularly for recently arrived Asian/Pacific Islander youth, who have limited language skills and who are lack social skills needed in American culture, drug use may be a way to find acceptance and develop friendships.
- *Identity Conflicts.* Asian/Pacific Islander youth face not only the problems of adolescence, but also those of coming to terms with the demands of the dominant culture to be more "American" and those of parents to be more "Asian" and those related to physical appearance--all of which may be alleviated (or avoided) through drug use.
- *Acculturation.* Although we have seen that the effects of acculturation are complex, it is true that young people generally learn and adopt the values, behaviors, and attitudes of the dominant culture faster than their parents, leading to conflicts between parent and child.
- *Role Reversal.* In families where the parents are non-English speaking, children who do speak English may be force to accept adult responsibilities to help the family function or even survive. Youth may turn to alcohol and drug use not only way to relieve the stress associated with added, unfamiliar responsibilities, but also to take on the behaviors of their adult role.

• *Family Life.* For recently arrived families, parents may be too overwhelmed with the problems of survival and adjustment to provide adequate emotional support, attention, and discipline to their children.

• *Avoidance and Denial.* Parents either may not be adequately informed about substance problems and the early warning signs or may deny that the problem exists.

These psychological and emotional problems can place Asian youth at risk for substance abuse. But it is also important to realize that the problems that young people face differ depending on whether the person is a new arrival or is from the second or third generation. In the former case, the person is facing the difficulties of learning a new language, adjusting to a new life, and possibly just surviving. For those of the second or third generation, the problem is not usually language or survival, but attempting to come to terms with the conflict between their own culture and the dominant American culture, often including racial prejudice and discrimination. In either case, the result is stress and emotional problems. As Chang (1981:4) notes, "Asian Americans often find themselves alienated from the mainstream of American society. They experience identity crises and tend to have feelings of loneliness, helplessness and powerlessness....Psychological isolation and alienation, in turn, lead to the development of low self-esteem."

Summary

The evidence regarding the relative influence of sociocultural factors and physiological factors in keeping alcohol use low among Asians is inconclusive, although it seems reasonable to assume that both operate and interact in ways not yet fully understood. Most investigators have focused either on physiological factors or sociocultural values, but the evidence suggests that both should be considered in explaining Asian drinking patterns. Sue and Nakamura (1984) have proposed what they call a reciprocity model in which alcohol consumption, the physiological dimension, and the social/psychological dimension interact with one another. Within the social/psychological dimension, a person's drinking behavior is presumed to be influenced by the culture of the person's parents and by the mainstream American culture. They also suggest that researchers attempting to disentangle the various influences on drinking among Asian-American groups would benefit by considering the successive generations of three groups: Asian Americans, recently arrived Asian Americans, and Caucasian Americans.

To the extent that the heightened physiological sensitivity of Asians to alcohol protects them against high levels of alcohol use and alcohol problems, Asian drinking levels will probably always remain below those of other ethnic groups. On the other hand, some studies have shown that drinking tends to be greater among Asians Americans who are more assimilated into American culture, which indicates that physiological factors do not automatically protect against higher levels of use. It also suggests that as Asian young people gradually loosen their adherence to traditional values and behaviors and adopt mainstream values, their use of alcohol and other drugs will increase, as will their risk of problems.

Prevention

Substance use levels, patterns, and norms among the various Asian nationalities, though similar when compared with those among Whites, are not identical; this should be taken into account in developing prevention programs for the different groups of Asian young people. An additional fact to consider in developing prevention programs is that the social norms for what is acceptable drinking behavior and what is not within Asian cultures are fairly clear and consistent, although the specific norms may vary somewhat from one Asian group to another. Prevention programs should draw attention to these norms and stress their utility in fostering moderate alcohol use.

Prevention is especially important in the Asian community since research indicates that many Asian-American substance abusers are shielded by their families and may not enter treatment until the late stages of the problem. An important part of a community prevention program for Asian Americans would be to provide education on alcoholism and drug abuse and to lessen the stigma that is attached to seeking professional help. Because of the importance of the family in Asian communities, prevention and intervention programs need to involve parents as individuals and as groups in their efforts; here, as in prevention work generally among Asian/Pacific Islanders, prevention staff need to be bicultural and bilingual (Kitano, Hatanaka et al. 1985; MSAPP 1988).

What we know about substance use among Asian Americans points to the need for prevention programs to address more than just alcohol and other drug use. Substance abuse prevention programs may need to be developed and implemented along with a broader range of programs that address the social and mental health problems that face new arrivals in this country. For example, recent immigrants, experiencing the stress that accompanies adjusting to the new culture, often without adequate social and institutional support, may turn to alcohol and other drugs to help them cope their problems. Providing alternative ways to deal with these problems would seem called for.

The studies of risk factors for substance use show that ethnic groups differ in the constellation of factors that place them at risk for starting and continuing drug use. For Asian students, factors that were found to be of little importance relative to other groups were poor academic achievement, early

alcohol use, social deviance, peer drug use, and adult drug use. Those risk factors on which Asian scored high were low religiosity, poor self-esteem, depression, poor relationship with parents, and sensation seeking. Although more work needs to be done on risk factors, this approach does suggest which factors should be stressed in programs designed for specific ethnic groups and which should be left out or at least given less attention. Since peer drug use was a risk factors for only 11% of Asian students, teaching this group refusal skills would probably have little influence on preventing or reducing use. By contract, 38% of Asian students were at risk of drug use because of low self-esteem and 28% because of depression. Thus, prevention programs directed at Asians might be more effective if they were to include materials and activities to improve self-esteem and cope with depression and other distressing feelings.

Two reports discuss specific principles and strategies for developing prevention programs for Asian-American youth. Chang (1981) presents prevention activities under four categories:

- *Information*: identification of resources and organizations within the Asian community, development of indigenous self-help networks, and publication of drug-information literature and service directories in Asian languages.
- *Education*: programs to educate young people in ethnic heritage and customs in order to promote cultural identification, self-esteem, and improved family communication; providing education for parents in English, American life, and drug abuse issues; and training bilingual and bicultural persons to carry out prevention services in Asian communities.
- *Alternatives*: recreational and sports activities, cultural heritage programs and discussion groups, community service activities, and clubs--all of which promote personal growth, self-esteem, cultural identity, and a sense of accomplishment.
- *Early Intervention*: family counseling and support, peer counseling, and community programs.

Other guidelines for prevention programs designed for Asian/Pacific Islander are provided in a report of the Ad Hoc Task Force of the Minority Substance Abuse Prevention Project, funded by the Office for Substance Abuse Prevention (MSAPP 1988). The task force expressed particular concern over the needs of the Amerasian children from Vietnam, who are more likely than other groups to become involved in drug trafficking and violent activities. The report also noted that "Just Say No" programs have little meaning for Asian/Pacific Islander youth; a more effective approach would be to provide information on the effects of substance abuse on the body. The development and implementation of prevention programs in Asian/Pacific Islander communities requires that key organizations and leaders be identified and involved in the programs. According to the task force report, "Every subgroup has power brokers that need to be identified to implement effective programs. With their participation, eventual penetration and successful implementation of programs in the groups may actually be easier."

Evaluations of substance abuse prevention programs that analyze results by ethnicity are few. Project SMART (Self-Management and Resistance Training), developed at the University of Southern California, provides students with social skills to resist drug offers and with affect management techniques to deal with decision making, values clarification, and stress. An evaluation of the program presented to seventh graders found that it was most effective for Asian students and least effective for Whites (Graham, Johnson et al. in press).

Another study evaluated the effectiveness of a tobacco and alcohol prevention program taught by minimally trained instructors. The components of the program included peer pressure resistance training, correction of normative expectations, inoculation against mass media messages, information about parental influences and consequences of use, making public commitments not to drink or smoke, and peer opinion leaders. The program had no effect on the onset of alcohol use among any ethnic group, nor did it prevent smoking among Asians or other minority students, although it was moderately successful among White students (Hansen, Malotte, and Fielding 1988).

Summary and Conclusions

The various studies that we have reviewed show that Asian/Pacific Islanders have high rates of abstinence and low rates of heavy use of alcohol and alcoholism compared with other ethnic groups, although variations within the various groups of Asian/Pacific Islanders must be recognized. In Hawaii, Native Hawaiians have the highest proportion of drinkers, followed by Japanese. Elsewhere, Japanese Americans drink more than other Asian groups. Chinese, Filipinos, and Koreans have low levels of use, although their relative rankings vary from study to study. No study has yet compared drinking among Indochinese in America with that of other Asian groups. Differences in drinking patterns between Asian males and females tend to be more pronounced than for other ethnic groups. As with alcohol, Asians/Pacific Islanders have lower levels of drug use than Whites, especially of marijuana, cocaine, and other hard drugs. The one exception is Native Hawaiians who, in a recent survey of student use, had overall use rates higher than all other Asian groups and Whites. There is some evidence to indicate that both alcohol and drug use among Asian Americans is increasing.

The low levels of alcohol consumption among Asian Americans are believed to be the result of differences in physiological factors and sociocultural values which interact in ways that are not yet clearly understood. Drug use among Asians is apparently not moderated by physiological factors, but the same sociocultural values that influence alcohol consumption probably also influence drug use.

While Asian-American youth are at lower risk for substance use compared with other ethnic groups, they are nonetheless at some risk, and that risk appears to be increasing. This may be a result of adopting the values and attitudes of American culture or of turning to alcohol and other drugs in order to cope with the stresses of learning to live in a new culture. There is also a belief among Asian-American substance abuse specialists that population and school-based surveys underestimate the extent of problems caused by alcohol and other drugs among Asian-American youth.

It should also be remembered that most of what we know about substance use among Americans of Asian ancestry derives from surveys of groups that have been in the United States for a generation or more, particularly Chinese and Japanese. The diversity of Asian Americans in national origin, generational status, degree of acculturation, economic status, and other traits means that care should be taken in making statements about drug use or drug problems of Asian Americans as a whole. Furthermore, these differences need to be recognized when developing prevention programs tailored to specific groups.

Despite the increased attention given to substance use and abuse among Asians/Pacific Islanders in recent years, much remains unknown. Topics and issues that warrant particular attention include within-group and between-group differences; generational effects; the influence of acculturation on specific groups; the risk factors that are most salient for Asian-American youth; and the extent of substance problems in Asian-American communities.

Even though research indicates that Asian-American youth have fewer risk factors than other groups, it is important to develop prevention programs for this population now since the number of risk factors to which Asian-American youth are exposed will likely to increase with increasing acculturation and since Asian Americans have a tendency to avoid treatment. From the limited information available on prevention programs for Asian Americans and from the literature on other ethnic groups reviewed in earlier *Updates*, it is evident that prevention programs need to take into account the values, customs, language, and specific drug use patterns and problems of Asian-American youth. They also need to identify existing community resources and organizations that can be enlisted in substance abuse prevention. Including the family rather than just the adolescent in program activities is also important. While such programs need to be developed and implemented now, their effectiveness would be improved if we knew more about the use of alcohol and other drugs among this group--its extent, its patterns, its problems, its correlates.

The state of California has funded two projects to estimate the prevalence of alcohol and other drug use within the Asian-American population, and the U.S. Office of Substance Abuse Prevention has funded several demonstration and prevention projects to address the needs of Asian communities. These projects should considerably expand our knowledge about use and prevention among Asian-American youth. Asian-American community organizations working on this problem include the Asian American Drug Abuse Program in Los Angeles, the Asian American Recovery Services in San Francisco, and the National Asian Pacific American Families Against Substance Abuse. Their addresses are provided in section 4 below.[2]

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[1]In the Overview, all percentage figures have been rounded to whole numbers. The decimal values appear in the abstracts.

[2]Ms Flora Yen of the Western Center for Drug Free Schools and Communities / Northwest Regional Educational Laboratory also provided invaluable assistance in the preparation of this issue.

ABSTRACTS

AKUTSU, PHILLIP D.; SUE, STANLEY; ZANE, NOLAN W.S.; AND NAKAMURA, CHARLES Y. 1989. Ethnic differences in alcohol consumption among Asians and Caucasians in the United States: An investigation of cultural and physiological factors. ***Journal of Studies on Alcohol*** **50(3):261-267. 18 refs.**

The present study examined Asian and Caucasian differences in alcohol consumption and the interaction of consumption with sociocultural values and physiological reactivity to alcohol. The subjects were 83 Asian (38 male, 45 female) and 96 Caucasian (48 male, 48 female) college students in Los Angeles who completed questionnaires on demographic information, general attitudes and values, level of alcohol consumption, attitudes toward drinking, and physiological reactivity.

Use Levels. The results indicated that Asians had lower levels of alcohol consumption than did Caucasians. Abstinence was reported by 20% of Asians, but by only 3% of Caucasians. Among drinkers, Asians were likely to be infrequent or light drinkers (51%), whereas Caucasians were more likely to be moderate or heavy drinkers (54%).

Correlates of Use. Multiple regression analysis indicated that physiological reactivity to alcohol and attitudes toward drinking were stronger determinants of ethnic differences in alcohol consumption than were general cultural values. Among Asians, the degree of acculturation was not a significant predictor of drinking, but physiological reactivity and attitudes toward drinking were significant in explaining consumption.

Conclusions. The results provide evidence that differences in the drinking behavior of Asians and Caucasians are primarily explained by physiological factors, in particular the increased sensitivity of Asians to alcohol. The study also suggests the importance of simultaneously evaluating physiological reactivity and sociocultural factors in alcohol consumption rather than examining them separately.

ANDERSON, PATRICIA S., AND DECK, DENNIS. 1987. ***Student Substance Use and Abuse in Hawaii: Analytic Report.*** **Portland, Ore.: Northwest Regional Educational Laboratory. 8 refs.**

In order to determine the extent of substance use among children and adolescents in Hawaii, two versions of the Hawaii Student Use Survey were administered to 39,341 private and public school students in grades six, eight, ten, and twelve. Sixth-grade students completed an elementary version of the survey containing 44 questions, and students in grades eight, ten, and twelve completed a standard version of the survey containing 60 questions. One of the many variables measured was ethnic differences in substance use, particularly for twelfth graders, from groups categorized as Filipino, Japanese, Hawaiian/Part Hawaiian, White, Mixed, and All Other.

Alcohol. Rates of alcohol use were highest among White and Hawaiian ethnic groups (91.4% and 91.1%, respectively). Filipino (81.3%) and All Other (80.9%) reported the lowest rates of alcohol use, with Japanese (86.4%) and Mixed (86.4%) racial groups reporting the same percentage of alcohol use. The Hawaiian/Part-Hawaiian and Mixed groups had greater percentages of heavy use.

Drugs. Even greater differences were reported among ethnic groups for drug use, with Hawaiians having the greatest percentage of drug use among twelfth-grade students. The percentage of drug use reported by students of Hawaiian, White, and Mixed ethnic groups was 66.2%, 58.9%, and 58.4%, respectively. Students of All Other, Filipino, and Japanese ethnic groups reported lower percentages of drug use (46%, 40.8%, and 39%, respectively).

Conclusions. It appears there are ethnic differences in alcohol and drug use, with Hawaiian students reporting among the greatest percentages of both alcohol and drug use, while Filipino, Japanese, and All Other ethnic groups reported the lowest rates of both alcohol and drug use.

CHI, IRIS; KITANO, HARRY H.L.; AND LUBBEN, JAMES E. 1988. Male Chinese drinking behavior in Los Angeles. ***Journal of Studies on Alcohol*** **49(1):21-25. 16 refs.**

The study was intended to identify the characteristics that distinguish male Chinese drinkers from abstainers and light drinkers from heavy drinkers. A random sample of 218 adult Chinese men from Los Angeles was interviewed as to their drinking behavior. Their mean age was 40.8 years; nearly 90% had been born in China, Hong Kong, or Taiwan.

Use Levels. Low levels of use were found; 22% of the sample were abstainers, and only 14% were heavy drinkers. The largest category was light drinkers (36.7%).

Correlates of Use. A logistic regression analysis of significant characteristics indicated that parental drinking and going to or giving parties were the most important variables differentiating abstainers from drinkers. Higher education was also related to drinking. A second logistic regression model was used to determine characteristics that predicted levels of drinking. Chinese men who went to bars and who had friends who drank were the most likely to be heavy drinkers.

CHI, IRIS; LUBBEN, JAMES E.; AND KITANO, HARRY H.L. 1989. Differences in drinking behavior among three Asian-American groups. *Journal of Studies on Alcohol* 50(1):15-23. 24 refs.

It is commonly believed that there are few if any heavy drinkers among Asian-Americans. This study was designed to test the hypothesis that different patterns of alcohol consumption would be observed among different groups of Asians. A survey of alcohol consumption patterns compared 298 Chinese (218 males, 80 females), 295 Japanese (235 males, 60 females), and 280 Koreans (155 males, 125 females) who were randomly selected from the Los Angeles area telephone book. The survey was administered to each participant in their home by interviewers of Chinese, Japanese, and Korean ancestry.

Use Levels. Japanese males (28.9%) had the highest percentage of heavy drinkers, followed by Korean males (25.8%) and Chinese males (14.2%). The majority of Korean males (44.5%) were abstainers, and Chinese males (17.9%) represented the highest percentage of moderate drinkers. Drinking patterns of females by ethnic group showed that 11.7% of the Japanese women were heavy drinkers, and 0.8% of the Korean women were heavy drinkers. There were no heavy drinkers among Chinese women. The highest percentage of female drinkers was found among the Japanese (73.3%), followed by the Chinese (48.7%). Females in the Korean group (75.2%) represented the highest percentage of abstainers.

Correlates of Use. Having friends who drank was significantly predictive of heavy drinking among both Chinese and Japanese males, while having parents who drank was significantly predictive of heavy drinking among Korean males. Since few Asian women drank heavy amounts, it was not possible to analyze these data; however, variables that predicted drinking behavior were analyzed. For Japanese women, there was a positive relationship between having a high education and drinking behavior, while a positive relationship between weekly worship and abstaining from drinking was found among Chinese women. Education and parents' drinking behavior were only marginally related to the drinking behavior of Chinese women. Korean female drinking was positively associated with parents' drinking behavior, and abstinence was positively associated with weekly worship.

Conclusions. This study showed that Asian Americans differ in their drinking behavior. However, having friends who drink was the common predictor of heavy drinking for Japanese, Chinese, and Korean males. Further, the data suggest that heavy alcohol consumption among Asian males, particularly Japanese and Koreans, is as prevalent as it is among men in the general U.S. population.

DANKO, GEORGE P.; JOHNSON, RONALD C.; NAGOSHI, CRAIG T.; YUEN, SYLVIA H.L.; GIDLEY, JANE E.; AND AHN, MELINDA. 1988. Judgments of "normal" and "problem" alcohol use as related to reported alcohol consumption. *Alcoholism: Clinical and Experimental Research* 12(6):760-768. 28 refs.

This study tested the hypothesis that alcohol consumption within an ethnic group is directly related to the group norms for drinking within the group. Adults (n=928) from Hawaii's five major racial/ethnic groups provided data on their own judgment of what constituted normal and problem use of alcohol, of what constituted the general social norm of normal and problem drinking, and of the degree to which various alcohol-related behaviors indicated problem use; data on alcohol use were also obtained. The ethnic groups were Caucasian, Chinese, Japanese, Filipino, and Hawaiian/Part Hawaiian.

Use Levels. Differences among the ethnic groups in consumption (measured in a combined quantity-frequency score) were significant; the groups ranked as follows (from highest to lowest): Hawaiian/Part Hawaiian, Filipino, Caucasian, Japanese, and Chinese. Although Filipinos had a high level of consumption, they also had a high level of abstinence (along with Chinese). Also, the consumption score of Japanese respondents was twice as high as that of Chinese, despite their common Asian ancestry and their similarity in flushing response.

Norms. Alcohol use norms varied across sexes and ethnic groups and were predictors of consumption both within and across groups. Also, small but significant differences among ethnic groups were found in the number of specific behaviors judged to be indicative of a drinking problem. Those groups reporting the highest levels of consumption (Hawaiian/Part Hawaiian and Caucasians) listed more behaviors as being problematic, particularly pathological as opposed to celebratory behaviors. Within all ethnic groups, subjects believed that other people were more liberal than themselves with regard to what level of drinking constituted both normal and problem use.

Conclusions. The results from this study indicate the drinking norms vary across ethnic groups and are directly related to alcohol consumption. The higher the level of drinking considered normal, the higher the level of consumption. One element of an alcohol prevention program might be to provide information of what other people regard as normal drinking behavior, especially since people tend to believe that others are more accepting of alcohol use than they are.

JOHNSON, RONALD C.; NAGOSHI, CRAIG T.; AHERN, FRANK M.; WILSON, JAMES R.; AND YUEN, SYLVIA H.L. 1987. Cultural factors as explanations for ethnic group differences in alcohol use in Hawaii. *Journal of Psychoactive Drugs* 19(1):67-75. 23 refs.

As a group, Asians have been found to manifest a more rapid ethanol metabolism but a less rapid acetaldehyde metabolism than Caucasians. The consequent aversive effects of alcohol (including facial flushing, increases in heart rate, and nausea) for Asians has been thought to be a factor in reducing alcohol consumption. Alternatively, ethnic group differences in alcohol use in Hawaii may be due to differences in cultural norms as to what constitutes normal and problem drinking. A survey questionnaire was distributed to 3,714 adult residents of the island of Oahu, including people of Chinese, Japanese, Filipino, Caucasian, Hawaiian/Part-Hawaiian, and Hapa-Haole ancestry. (The latter term refers to a person with one Caucasian and one Asian parent.) Questionnaire items examined demographic characteristics, quantity and frequency of alcohol use, familial alcohol use, personal attitudes toward alcohol, reasons for drinking or not drinking, physiological symptoms following alcohol use, social problems with alcohol, and some personality measures.

Cultural Influences. Subjects of mixed Caucasian-Japanese ancestry drank at levels that were similar to those of nonmixed Caucasian ancestry and that were considerably higher than those of nonmixed Japanese ancestry. The incidence of facial flushing in the Caucasian-Japanese group was comparable to that found in the nonmixed Japanese group and was higher than that found in the nonmixed Caucasian group, which supports previous research indicating that flushing has little influence on alcohol use among ethnic groups in Hawaii. Chinese, Filipinos, and Japanese subjects who were born in Hawaii were more likely to drink than those born in their ancestral homelands. Among Caucasians, those born in Hawaii had a lower prevalence of drinking than those born in the mainland U.S. The prevalence of alcohol use among Hapa-Haoles was similar to that reported by Caucasians; also, Hapa-Haoles who were born in Hawaii tended to have a lower level of alcohol use than those who were born in the mainland U.S.

Conclusions. The results provide strong, although indirect, support for the idea that cultural norms are important determinants of the level of alcohol use and probably of the risk for alcoholism. They argue against genetic differences between ethnic groups in alcohol metabolism as a reason for ethnic group differences in levels of alcohol use and alcoholism. The results also suggest that in a multiethnic society in which there is frequent interaction and intermarriage the different groups influence each other in their attitudes toward alcohol use.

JOHNSON, RONALD C.; SCHWITTERS, SYLVIA H.L.; WILSON, JAMES R.; NAGOSHI, CRAIG T.; AND MCCLEARN, GERALD E. 1985. A cross-ethnic comparison of reasons given for using alcohol, not using alcohol, or ceasing to use alcohol. *Journal of Studies on Alcohol* 46(4):283-288. 14 refs.

This study sought to determine whether differences between ethnic groups in alcohol consumption could be accounted for by differences in reasons given for drinking, never drinking, or ceasing to drink. Questionnaires were completed by 3,712 adult residents of Hawaii, representing six ethnic groups: Chinese, Japanese, Filipino, Caucasian, Hawaiian or part-Hawaiian, and Hapa-Haole (mixed Oriental and Caucasian ancestry).

Reasons for Drinking. Across all ethnic groups, subjects endorsed celebratory reasons for drinking (e.g., for fun, in a good mood, to be sociable) much more often than pathological reasons (e.g., when tense, when sad, wish were different person). Significant differences were found among the ethnic groups in the mean number of reasons given for drinking, with those groups that reported higher alcohol consumption (e.g.,Caucasians) giving more reasons for drinking than those reporting lower consumption (e.g., Chinese). The main exception was Filipinos, who had a relatively large number of abstainers or former drinkers; but those who did drink were more likely to check pathological reasons than the other groups. Across all ethnic groups, the higher the level of use, the more often was each reason for drinking endorsed and the more reasons were checked. Subjects who checked more pathological than celebratory reasons for drinking were also likely to indicate that they had problems with drinking.

Reasons for Not Drinking. Reasons for not drinking by abstainers and former drinking also differed across ethnic groups. Caucasians and Hawaiians endorsed religion as a reason for not drinking more often than did the other groups. Disliking the taste of alcohol was endorsed less often by Caucasians than by the other groups.

Conclusions. The findings seem to indicate that differences between ethnic groups in drinking levels are more likely the result of different norms for what is acceptable drinking behavior rather than of genetic or environmental differences. One area that deserves further study is the possibility that differences in taste sensitivity may influences alcohol use.

KITANO, HARRY H.L.; CHI, IRIS; LAW, C.K.; LUBBEN, JAMES; AND RHEE, SI-YUN. 1988. Alcohol consumption of Japanese in Japan, Hawaii, and California. In: Towle, L.H., and Harford, T.C., eds. *Cultural Influences and Drinking Patterns: A Focus on Hispanic and Japanese Populations*. Washington, D.C.: GPO. pp. 99-133. 20 refs.

This paper reported on alcohol consumption patterns among Japanese living in Oahu, Hawaii; Santa Clara County and Los Angeles, California; and four cities in Japan. A comparison sample of Caucasians from Santa Clara was also included. The hypothesis was that the drinking patterns of Japanese-Americans living in Hawaii would be closer to those living in Japan than to those living in California. Also, because the Japanese population in Santa Clara was smaller and more integrated than that in Los Angeles, it was expected that the drinking patterns of the Japanese in Santa Clara would more closely resemble those of the mainstream culture than elsewhere. The Santa Clara sample consisted of 516 Japanese Americans and 526 Caucasians; in Oahu, 415 Japanese were interviewed; in Los Angeles, 295; and in Japan, 1,225.

Use Levels. There were statistically significant differences in drinking levels between locations for both males and females. Among males, the rank order for abstainers was Hawaii (20.8%), Santa Clara (18.5%), Los Angeles (13.5%), Caucasians (12.7%), and Japan (9.4%). The highest level of heavy drinking was reported by Japanese-Americans living in Los Angeles (35.8%), followed by Japan (32.4%), Hawaii (29.0%), Caucasians (26.4%), and Santa Clara (12.9%). Among females, abstinence was most common in Japan (45.1%) and lowest among Caucasians (16.9%), with Hawaii (33.7%), Los Angeles (26.7%), and Santa Clara (26.2%) falling in between. The rank order for heavy drinking among females was Los Angeles (13.3%), Caucasians (11.4%), Hawaii (9.1%), Santa Clara (4.2%), and Japan (3.8%).

Characteristics of Drinkers. Significant differences were found for various socioeconomic characteristics at one or more of the locations. Generally, there were higher proportions of drinkers among younger age groups, among those with more education, among those with higher income, among those with lower church attendance, and among those from families in which both parents drank. Among the three Japanese-American groups,drinking differed significantly by generation (except for Japanese women in Los Angeles). Among males, the highest proportion of drinkers was found among the Sansei (third generation) in Hawaii and Santa Clara and among the Nisei (second generation) in Los Angeles. Among females, drinking was highest among the Sansei and lowest among the Nisei.

Further analysis of the results using logistic regression models to evaluate the significant characteristics differentiating drinkers from abstainers and heavy drinking males from non-heavy drinking males found no clear pattern among the sites.

Conclusions. It would appear that drinking styles in Japan exert little influence on Japanese Americans in different locations in the United States. Drinking patterns in a specific location seem to be more influenced by the experiences of Japanese Americans in their respective areas of residence. The assimilationist model from which the main hypothesis of this study was drawn makes two assumptions that may not be warranted: (1) Drinking patterns remain constant in Japan and change only after emigration to the United States; (2) drinking patterns throughout Japan are homogeneous. The results of this study emphasize the danger of generalizing from the drinking patterns of Japanese Americans in a single location to Japanese Americans as a whole and the importance of taking location and local conditions into account in studying Japanese American drinking patterns.

KITANO, HARRY H.L.; LUBBEN, JAMES E.; AND CHI, IRIS. 1988. Predicting Japanese American drinking behavior. *International Journal of the Addictions* 23(4):417-428. 7 refs.

The purposes of this study was to assess drinking patterns among Japanese Americans in Los Angeles from interviews with a random sample of heads of households with Japanese surnames (n=295). The specific aims of the study were to determine the characteristics that differentiate drinkers from abstainers and heavy drinkers from light drinkers, and to develop models that would predict Japanese-American drinking behavior.

Use Levels. Japanese Americans born in the United States had lower drinking levels than those born in Japan. Significant gender differences were found in Japanese-American drinking behavior: abstinence was reported by 16.6% of males and 26.7% of females, whereas heavy drinking was over twice as high among males (28.9%) as among females (11.7%). Those respondents who did drink tended to be either light drinkers or heavy drinkers, rather than moderate drinkers.

Correlates of Use. Demographic and social determinants of drinking were examined through logistic regression. The most important variables differentiating abstainers from drinkers were going to bars or nightclubs and attending religious services. Japanese Americans who had more education, had been born in Japan, had a mother who drank, and had close friends who drank were more likely to be drinkers than abstainers. Respondents were more likely to be heavy drinkers if they reported that they frequently drank alcohol with neighbors or with close friends. Other, less significant, variables associated with heavy drinking were age, going to bars or nightclubs, and income.

Problems. None of the respondents reported that alcohol was a problem for them, but there was

occasional mention of friends or relatives with alcohol-related problems.

LE MARCHAND, LOIC.; KOLONEL, LAURENCE N.; AND YOSHIZAWA, CARL N. 1989. Alcohol consumption patterns among five major ethnic groups in Hawaii: Correlations with incidence of esophageal and oropharyngeal cancer. In: National Institute on Alcohol Abuse and Alcoholism. *Alcohol Use among U.S. Ethnic Minorities*. Rockville, Md.: National Institute on Alcohol Abuse and Alcoholism. pp. 355-371. 24 refs.

Ethnic differences in drinking habits were examined among the five major ethnic groups in Hawaii (Caucasians, Japanese, Chinese, Filipinos, and Native Hawaiians) using interview data collected between 1975 and 1980 from a representative sample of approximately 50,000 Hawaiian residents.

Use Levels. Native Hawaiians had the highest consumption of beer, and Caucasians had the highest consumption of wine and spirits. Overall, total alcohol consumption was similar for these two ethnic groups and was considerably higher than consumption among the three Asian groups. This pattern was observed when either daily or lifetime use of alcohol was compared and was rather consistent between sexes and age groups. Although alcohol use was not unusually high among Native Hawaiians, Native Hawaiians who drank tended to consume more alcohol than drinkers in the other groups. Weekly drinking patterns were very similar among races and did not suggest that binge or regular drinking was more likely among any particular group.

LUBBEN, JAMES E.; CHI, IRIS; AND KITANO, HARRY H.L. 1988. Exploring Filipino American drinking behavior. *Journal of Studies on Alcohol* 49(1):26-29. 12 refs.

The purpose of this study, the first to study Filipino-American drinking, was to explore characteristics that distinguished levels of drinking among Filipino Americans through interviews with a sample of 298 adult Filipinos in Los Angeles. Two logistic regression analyses were conducted, one to identify social factors that distinguished female drinkers from female abstainers, the other to determine factors that differentiated heavy drinkers from light drinkers among males.

Use Levels. Over half (55%) of females and 19% of males were abstainers, whereas heavy drinking was reported by 3.5% of females and 29% of males. Heavy drinking was thus almost exclusively a male activity.

Correlates of Use. The only significant variable common to both logistic regression models was regular participation in religious service (frequent attendance was associated with lower consumption). The other significant variable for females was education (those with higher education were more likely to drink). For males, additional significant variables were income (low income men drank more) and having friends who drank.

Conclusions. It was concluded that drinking behavior among Filipino females conformed to the traditional Asian drinking pattern, whereas Filipino men were more similar in their drinking to American patterns.

LUBBEN, JAMES E.; CHI, IRIS; AND KITANO, HARRY H.L. 1989. The relative influence of selected social factors on Korean drinking behavior in Los Angeles. *Advances in Alcohol & Substance Abuse* 8(1):1-17. 11 refs.

A sample of Korean-American adults in Los Angeles (n=280) was interviewed in order to identify characteristics that distinguish Korean-American drinkers from abstainers and to determine characteristics that distinguish heavy drinkers from light/moderate drinkers. Logistic regression was used to determine the relative influence of various social factors on drinking behavior.

Use Levels. Over half (58%) of the sample were abstainers, and only about 15% were heavy drinkers. All but one of the heavy drinkers were men, while 75% of the abstainers were female. Still, a high percentage of males (45%) were abstainers.

Correlates of Use. The logistic model identified five characteristics that differentiated abstainers from drinkers: gender (male), college education, parental opposition, playing indoor games (e.g., cards), and going to bars or nightclubs. A second logistic model was used to determine the characteristics that influenced the level of drinking. Males and those who went to bars or nightclubs were most apt to be heavy drinkers, while participation in sports and being Protestant were associated with more moderate drinking.

MCLAUGHLIN, DENNIS G.; RAYMOND, JONATHAN S.; MURAKAMI, SHARON R.; AND GOEBERT, DEBORAH. 1987. Drug use among Asian Americans in Hawaii. *Journal of Psychoactive Drugs* 19(1):85-94. 17 refs.

In order to determine patterns of drug use among Asian Americans in Hawaii, a statewide sample of adults from 2,503 households was obtained. The interview schedule consisted of questions relating to demographic characteristics, alcohol and other drug use, psychiatric symptomatology, and psychological stress. The alcohol and drug use patterns of Chinese Americans, Japanese Americans, and Filipino Americans were compared with those of Native Hawaiians and Caucasians. The drugs included in present report were barbiturates, tranquilizers, marijuana/hashish, inhalants, LSD, PCP, amphetamines, cocaine, methadone, heroin, pain drugs (morphine, Percodan, Demerol), and alcohol. Psychosocial predictors of substance use were examined across ethnic groups.

Use Levels. With one exception, lifetime use of all drugs was higher among Caucasians and Native Hawaiians than among those of Chinese, Japanese, and Filipino ancestry; the exception was tranquilizers, where Native Hawaiians had lower use than did Chinese and Japanese Americans. For all drugs, Caucasians had the highest rates of use. There were differences in the relative rankings of the three Asian-American groups. Filipino Americans reported the lowest overall drug use; Chinese-American and Japanese-American respondents were similar to one another in their drug use.

Correlates of Use. No consistently clear pattern of predictors of alcohol and other drug use among Asian Americans was found. Different variables (age, sex, age, marital status, mental health symptoms) predicted drug use for some groups but not for others. There was some indication that Asian Americans were more likely to use drugs to self-medicate than were Caucasians, suggesting that they are reluctant to seek existing psychiatric or psychological services compared with Caucasians.

MADDAHIAN, EBRAHIM; NEWCOMB, MICHAEL; D.; AND BENTLER, PETER M. 1988. Risk factors for substance abuse: Ethnic differences among adolescents. *Journal of Substance Abuse* 1(1):11-23. 30 refs.

Differences among ethnic groups in terms of risk factors for substance use were explored, based on results from a sample of students in 10th, 11th, and 12th grades in Los Angeles (n=994) who were part of a longitudinal survey of drug use. Five substance-use scales measuring frequency of use during the past six months were included in the analysis: cigarettes, alcohol, cannabis, nonprescription medication, and hard drugs. In addition, prevalence of use of a specific drug was defined as use at least once in the past six months; heavy use was defined as at least daily use of a substance, except for hard drugs, for which heavy use was defined as use at least once a week. The ten risk factors were low academic achievement, lack of religiosity, early alcohol use, low self-esteem, psychopathology (depression), poor family relationship, social deviance, sensation seeking, perceived peer drug use, and perceived adult drug use.

Risk Factors. Differences among the ethnic groups (Asian, Black, Hispanic, White) were not significant for three risk factors: low academic achievement, psychopathology, and poor relationship with family. Of the other variables, Asians had the highest level of risk for low religiosity and poor self-esteem; they had the lowest level of risk in regard to four risk factors: early alcohol use, social deviance, peer drug use, and adult drug use. In general, ethnic differences among the mean risk factor score were significant, with Whites having the highest mean score, followed by Hispanics, Asians, and Blacks. Heavy use of alcohol was associated with increasing number of risk factors only for Black students. For every ethnic group, heavy use of cannabis was associated with increasing risk factors. There was no relation between number of risk factors and heavy use of nonprescription medications. Heavy use of hard drugs was associated with increasing number of risk factors for Hispanics, Asians, and Whites, but not for Blacks. For all ethnic groups, the risk factors score was significantly related to the prevalence of alcohol, cannabis, and hard drugs; for nonprescription medications, the association was significant for all groups except Hispanics. Overall, 30% of the White students and 31% of the Hispanic students had a high risk for using drugs (four or more risk factors), compared with 25% of Asians and 10% of Blacks.

Conclusions. Prevention programs should consider all the risk factors that contribute to substance abuse among adolescents, but they also need to consider that young people from different ethnic groups have different sets of risk factors for substance use. For Asian students specifically, the main high-risk factors were low religiosity, poor self-esteem, poor relationships with family, and sensation seeking. This would indicate that prevention programs directed to Asian adolescents should include elements that provide psychological support.

MURAKAMI, SHARON R. 1989. An epidemiological survey of alcohol, drug, and mental health problems in Hawaii: A comparison of four ethnic groups. In: National Institute on Alcohol Abuse and Alcoholism. *Alcohol Use among U.S. Ethnic Minorities.* Rockville, Md.: National Institute on Alcohol Abuse and Alcoholism. pp. 343-353. 14 refs.

The Hawaiian Department of Health, Mental Health Division conducted a statewide epidemiological survey in 1984, using a two-stage cluster sampling procedure within each of the eight mental health catchment areas in Hawaii. A sample comprising 2,503 individuals aged 18 and older was obtained, yielding a significant proportion of Caucasians (28.5%), Japanese (21.6%), Filipinos (11.4%), and Native Hawaiians (18.9%). A interview questionnaire elicited information on individual alcohol consumption, problems related to drinking, drug use, psychiatric symptomatology, and other correlates of alcohol use. This paper examined the rate of alcohol use and abuse, the extent of alcohol consumption, and correlates of alcohol consumption among four ethnic groups in Hawaii.

Use Levels. The percentage of Native Hawaiian drinkers, although lower than that for Caucasians, exceeded the percentage of Japanese and Filipino drinkers. Moreover, Native Hawaiians consumed less alcohol than Caucasians but more than other ethnic groups such as the Japanese and Filipinos.

Problems. A similar pattern was also found with problems related to alcohol consumption. Barriers to seeking professional help were reported by each ethnic group. Higher percentages of Native

Hawaiians, Japanese, and Filipinos reported barriers than did Caucasians.

SCHWITTERS, SYLVIA Y.; JOHNSON, RONALD C.; WILSON, JAMES R.; AND MCCLEARN, GERALD E. 1982. Ethnicity and alcohol. *Hawaii Medical Journal* 41(2):60-63. 14 refs.

In order to examine ethnic differences in alcohol use and the effects of alcohol, questionnaires were administered to 3,714 adults (age 20 years and over) on the Island of Oahu. The subjects were from six ethnic groups on Hawaii: Caucasian, Chinese, Filipino, Hapa Haole, Hawaiian/Part-Hawaiian, and Japanese. Approximately equal numbers in each ethnic group were sampled.

Use Levels. Considerable differences were found in drinking behavior among the six groups. The percentage of abstainers in each groups was as follows (from low to high): Caucasian 4.3%; Hapa Haole 7.0%; Hawaiian/Part-Hawaiian 11.1%; Japanese 16.7%; Chinese 17.1%; and Filipino 31.1%. The rank order of drinkers (from high to low) was similar to that for abstinence, except that the order of the Chinese and the Japanese are switched: Caucasian 81.3%; Hapa Haole 80.1%; Hawaiian/Part-Hawaiian 69.5%; Chinese 69.2%; Japanese 67.4%; and Filipino 49.2%. The range in the percentage of former drinkers was much narrower than for abstainers or drinkers: Hapa Haole 12.9%; Chinese 13.1%; Caucasian 14.2%; Japanese 15.8%; Hawaiian/Part-Hawaiian 19.4%; and Filipino 19.7%. Analysis of drinking scores (quantity-frequency) of former drinkers found that Caucasians were much heavier drinkers than the other groups before they quit.

Problems. For all groups, the number of symptoms and problems associated with drinking increased with increasing alcohol use. Furthermore, former drinkers reported that they had experienced more symptoms and problems than those who continued to drink. Among current drinkers, Caucasians at all levels of use had at least as many, and often more, symptoms and problems than did members of any of the other ethnic groups.

Conclusions. It appears that differences in drinking behavior between Caucasians and Asians result from differences in preference rather than from differences in tolerance. Also, while considerable ethnic differences in drinking behavior were evident, the differences are not as great as popular belief or treatment admissions would suggest.

SUE, STANLEY; ZANE, NOLAN; AND ITO, JOANNE. 1979. Alcohol drinking patterns among Asian and Caucasian Americans. *Journal of Cross-Cultural Psychology* 10(1):41-56. 15 refs.

This study was designed to explore possible ethnic and cultural influences on alcohol consumption. A drinking habits questionnaire was completed by 47 Asian American (23 Chinese, 24 Japanese) and 77 Caucasian students from the University of Washington. Five categories of drinking patterns were measured, ranging from abstinence (or infrequent use of alcohol) to very heavy drinking. The students subsequently completed an attitude questionnaire measuring degree of agreement or disagreement with attitudes toward drinking and toward controlling drinking.

Use Levels. Different patterns of drinking were observed across ethnic groups. Asians consumed alcohol less frequently and in lesser amounts than Caucasians, although alcohol consumption by Asians increased with length of time living in the United States.

Attitudes. Attitudes toward drinking also differed between the ethnic groups studied. Asian students reported greater self and parental disapproval of drunkenness, but apparently this had little to do with negative attitudes toward alcohol harming the body. In addition, Asian Americans were no more likely to regulate their drinking due to physiological indicators of drunkenness than were Caucasian.

Conclusions. Consistent with other studies, Asian Americans reported less drinking than did Caucasians. The findings are inconsistent with the genetic hypothesis, which assumes physiological differences between races related to alcohol consumption. The findings seem to support the cultural hypothesis in view of the following: most assimilation measures indicated significant correlation with Asian patterns of drinking; and negative attitudes toward drinking instead of physiological reasons were related to less drinking by Asian Americans.

WONG, HERBERT Z. n.d. Substance use and Chinese American youth: Preliminary findings on an interview study of 123 youths and implications for services and programs. San Francisco: Youth Environment Study.

A community-based, pilot survey was conducted of substance use and problems among Chinese-American youth in the Chinatown section of San Francisco. The sample of 123 youths (ages 13 to 19 years) was selected for interview by a chain referral method rather than randomly. The interview schedule had been used in previous surveys of substance use among Black, Latino, and White youth in San Francisco, which provided the opportunity to compare results from the present survey with the earlier ones.

Use Levels. The percentage of ever use of various substances by Chinese youth was as follows: beer 77.2%; cigarettes 74.6%; marijuana 58.5%; wine 54.1%; hard liquor 48.8%; quaaludes 42.3%; cocaine 39.8%; hashish 22.0%; Valium 16.3%; LSD 15.4%; amyl nitrates 2.4%; opium 1.6%; morphine 1.6%; PCP 0.8%; glue 0.8%; and heroin 0.0%. For all drugs except Valium, Codeine, and quaaludes, males were more likely to use drugs than females. Use of quaaludes was particularly high among Chinese-

American youths (42.3%) compared with Latinos (20.6%), Whites (19.0%), and Blacks (9.4%). But Chinese youth reported lower levels of use for PCP, pill amphetamines, Valium, and heroin. For older users (ages 16 to 19 years), reported levels of ever use of most drugs was higher than those found in national survey studies or in the earlier surveys in San Francisco.

The most frequently used substances were cigarettes, marijuana, beer, hard liquor, and quaaludes. Substances that ranked in moderate to low frequency were hashish, cocaine, LSD, barbiturates, Valium, and Codeine. The least frequently used substances were mescaline, mushrooms, pill amphetamines, methedrine, and amyl nitrate.

Positive Experiences. The sample reported a variety of positive experiences to be associated with substance use; the five most common responses were: feel relaxed (56.9%); feel happy and carefree (56.9%); feel less anxious and tense (54.5%); find music more enjoyable (52.0%); and find it easier to rap with girls/boys (37.4%).

Problems. Negative physiological and psychological problems associated with substance use included: being sick because of alcohol (48.0%); had a smoker's cough (41.5%); had a hangover from alcohol (39.8%); had shortness of breath from smoking (38.2%); and suffered memory loss from alcohol or drugs (24.4%).

Education and Treatment. Only 5.7% of those who used alcohol or drugs had sought out help, and only 1.6% had received treatment in an alcohol or drug program. Nearly three-quarters of the Chinese-American youth had some type of drug education and 40.3% said that information they had received about drugs made them less interested in trying them. Over 80% believed that the drug education they had received was of value.

Conclusions. Although the nonrandom nature of the sample should be kept in mind, the findings of this study suggest that substance use and abuse among Chinese-American youth is higher than previously believed, with females exceeding males in the use of some drugs. It is recommended that Chinese and other Asian Americans be involved in planning and program development; that culturally sensitive prevention and intervention programs be developed; that methods be found to overcome the reluctance to enter treatment; that prevention programs be concerned with the substances actually used by Chinese-American youth and with the cultural aspects of substance use; and, finally, that further research using systematic and random sampling be carried out.

YEE, BARBARA W.K., AND THU, NGUYEN DINH. 1987. Correlates of drug use and abuse among Indochinese refugees: Mental health implications. *Journal of Psychoactive Drugs* 19(1):77-83. 15 refs.

Indochinese refugees (mainly Vietnamese) face many problems of adjusting to life in the United States, for which social and institutional support is often not available. As a result, refugees may turn to alcohol or drugs to attempt to deal with or to forget their problems. The particular substance used is probably affected by age, length of time in the United States, and degree of assimilation. Alcohol may be used mainly by older refugees, while younger refugees may be more likely to use drugs. In order to provide information on mental health and substance abuse among Indochinese refugees, 840 refugees in Houston (90% Vietnamese) were interviewed. Nearly 60% had arrived in the United States from 1975 to 1979.

Problems. Nearly half (45%) of the sample reported that they some time had trouble with alcohol or tobacco, while 7.9% had trouble with these drugs all the time. Other drugs were sometimes a problem for 13.9% of the sample.

Correlates of Use. Drugs were fairly often used as a coping mechanism; 40.4% of the refugees used alcohol, 11.9% used other drugs, and 44.2% used tobacco sometimes to help diminish their problems. Frequent use of these drugs to diminish problems was reported by 5.8% for alcohol, 0.5% for other drugs, and 11.7% for tobacco. The use of drugs as a coping mechanism was significantly related to reports of having trouble with tobacco, alcohol, and other drugs.

It was also found that the greater the worries and concerns, troubles, and depression, the more likely were drugs used as a coping mechanism. However, higher degree of satisfaction about living in the United States was also positively related to the use of drugs as a coping mechanism, possibly because younger and less traditional refugees were both more satisfied with their life in the U.S. and tended to use alcohol and other drugs more often than older and more traditional refugees.

Conclusions. Although problems associated with the use of alcohol and other drugs among Indochinese refugees are not as great as among some other ethnic and disadvantaged groups, it is likely that the seriousness of the problem will increase in the future. Part of the reason for the use of drugs within this population is the need to face numerous adjustment and mental health problems without adequate social and institutional support; substance use becomes a way to diminish stress and forget problems.

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AUTHOR AND INFORMATION SOURCE ADDRESSES

The following is a list of the institutional affiliations of the first author of the abstracted documents and the addresses of other information sources.

AUTHOR AFFILIATIONS

Akutsu, Phillip D.
Department of Psychology
University of California, Los Angeles
Los Angeles, California 90024

Anderson, Patricia S.
Northwest Regional Educational Laboratory
101 S.W. Main Street, Suite 500
Portland, Oregon 97204

Chi, Iris
Department of Social Work
University of Hong Kong

Danko, George P.
Behavioral Biology Laboratory
University of Hawaii
Honolulu, Hawaii 96822

Johnson, Ronald C.
Behavioral Biology Laboratory
University of Hawaii
Honolulu, Hawaii 96822

Kitano, Harry H.L.
School of Social Welfare
University of California, Los Angeles
Los Angeles, California 90024

Le Marchand, Loäc
Epidemiology Program, Cancer Research Center
University of Hawaii
1236 Lauhala Street, Suite 407
Honolulu, Hawaii 96813

Lubben, James E.
School of Social Welfare
University of California, Los Angeles
Los Angeles, California 90024

McLaughlin, Dennis G.
Mental Health Division
State Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801

Maddahian, Ebrahim
Department of Psychology
University of California, Los Angeles
Los Angeles, California 90024

Murakami, Sharon R.
Mental Health Division, State Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801

Sue, Stanley
University of Washington
Seattle, Washington 98105

Wong, Herbert W.
Richmond Area Multi-Services, Inc.
3626 Balboa
San Francisco, California 94121

Yee, Barbara W.K.
School of Allied Health Sciences
University of Texas Medical Branch
Route J 28
Galveston, Texas 77550

OTHER INFORMATION SOURCES AND PROGRAMS

Asian American Drug Abuse Program
5318 S. Crenshaw Blvd.
Los Angeles, CA 90043
(213) 293-6284

Asian American Recovery Services
300 4th St
San Francisco, CA 94107
(425) 896-5213

Minority Advisory Committee
Office of the Administrator
Alcohol, Drug Abuse and Mental Health Administration
5600 Fishers Lane
Rockville, Maryland 20857

Minority Programs
National Council on Alcoholism
733 3rd Avenue
New York, New York 10017

National Asian American Health Forum
835 Jackson St
San Francisco, CA 94133
(415) 391-8494

National Asian Pacific American Families Against Substance Abuse (NAPASASA)
6303 Friendship Court
Bethesda, MD 20817
(301) 530-0945

National Clearinghouse for Alcohol and Drug Information
P.O. Box 2345
Rockville, Maryland 20852

Prevention Research Update
Gregory A. Austin, Editor
Michael L. Prendergast, Asst. Editor
Southwest Regional Laboratory

Western Center for Drug-Free Schools and Communities
Judith A. Johnson, Director
Northwest Regional Educational Laboratory

Northwest Regional Educational Laboratory
101 S.W. Main Street, Suite 500
Portland, Oregon 97204
(503) 275-9500

Center for the Advancement of Pacific Education
1164 Bishop Street, Suite 1409
Honolulu, Hawaii 96813
(808) 533-1748

Far West Laboratory for Educational Research & Development
1855 Folsom Street
San Francisco, California 94103
(415) 565-3000

Southwest Regional Laboratory
4665 Lampson Avenue
Los Alamitos, California 90720
(213) 598-7661

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